REMARKS

Claims 1-17 were pending in the present application. New claims 18 and 19 are added herein, thus claims 1-19 are now pending. The applicants respectfully request reconsideration and allowance of the present application in view of the above amendments and the following remarks.

Claim 1 was previously rejected under 35 USC §112, second paragraph, as being allegedly indefinite. While the rejection does not appear to have been renewed, the Examiner has noted that the applicants' remarks were not persuasive. Applicants are confused as to the meaning of the Examiner's comments on page 2 of the Office Action in this regard. Since no specific rejection under 35 USC §112, second paragraph is noted, applicants will assume that the previous rejection has been withdrawn.

The Examiner further notes that the drawings are objected to as allegedly failing to comply with the rules. Specifically, the Examiner alleges that reference character 31 is used to designate both the second antenna and the linear metal bars of claim 2. Applicants note for clarification that the reference character 31, for example, designates only the second antenna in claim 1, e.g. the linear conductor bar 31 in Fig. 2, Fig. 12, and in other figures. The linear metal bars recited in claim 2, in accordance with the drawings, are designated by the reference character 5 as can be seen, for example, in Figs. 12, 19-21, 36, and the like. Accordingly, applicants do not believe any drawing changes are necessary.

Claims 1, 3, 6, 8, and 9 stand rejected under 35 USC §102(b) as being allegedly anticipated by Sievenpiper et al., U.S. Patent No. 6,433,756 (hereinafter "Seivenpiper '756") The rejection is respectfully traversed.

Applicants note by way of brief summary, that the present invention can be characterized generally in that a first antenna (21) and a second antenna (31) are provided on a substrate (11) to

resonate at different frequencies within and outside of a band gap provided on the substrate surface.

A close review of Seivenpiper '756 first reveals a teaching away from the first and second antenna of the claimed invention by the description provided in the opening sections thereof. For example, Seivenpiper '756 attempts to avoid unsightly and unaerodynamic antenna farms which are necessary for providing more functionality. Seivenpiper '756 describes that if circular or horizontal polarization is required, the vertical monopole is not a viable option (see, e.g. col 3, line 30). Accordingly, Seivenpiper '756 can be said to teach away from the claimed invention where a first antenna and a second antenna are provided on the same substrate for resonating ***at different frequencies*** as claimed, e.g. within and outside a band gap. Seivenpiper '756 at best describes at col 5, line 19 and 20 that more than one antenna is preferably used to provide a radiation pattern ***within the same frequency band.*** Seivenpiper '756 therefore specifically fails to disclose a first antenna and a second antenna, the first antenna resonating within and the second antenna resonating out of a band gap provided on the surface of the substrate as in the claimed invention. Seivenpiper '756 specifically teaches away from the claimed configuration by describing that, contrary to prior art use within the band gap, the antenna 10 is operated in a frequency in the LA region to improve low angle radiation (see, e.g. col. 8, line, 49, line 54, and line 59).

Accordingly, for at least the reasons set forth hereinabove, a *prima facie* case of anticipation has not properly been established in that Seivenpiper '756 fails to disclose all the claimed features as required. It is respectfully requested that the rejection of independent claim 1 be reconsidered and withdrawn.

Claims 3, 6, 8, and 9, by virtue of depending from independent claim 1, are allowable for at least the reasons set forth hereinabove. It is respectfully requested therefore that the rejection of claims 3, 6, 8, and 9 be reconsidered and withdrawn.

In addition it is submitted that claims 3, 6, 8, and 9 are independently allowable in that, for example, in failing to disclose the first and second antenna as claimed, e.g. the first antenna first antenna resonating within and the second antenna resonating out of a band gap, Seivenpiper '756 necessarily fails to disclose that the first antenna and the second antenna are coupled with a same power feeding line at an area near a power feeding point, that the first antenna is an inverse L-shape antenna, that the multiple-frequency common antenna further comprises a dielectric material plate disposed on the surface of the substrate sheet, wherein the first antenna is an element pattern formed on the surface opposing to the substrate sheet of the dielectric material plate, and wherein the second antenna is a monopole antenna.

Claims 4, 5, 7 and 10-12 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Seivenpiper '756 in view of Biswas et al., U.S. Patent No. 6,593,894 (hereinafter "Biswas"). The rejection is respectfully traversed.

Claims 4, 5, 7, and 10-12, by virtue of depending from claim 1, are allowable for at least the reasons set forth herein above. It is respectfully requested therefore that the rejection of claims 4, 5, 7, and 10-12 be reconsidered and withdrawn.

In addition it is submitted that claims 4, 5, 7, and 10-12 are independently allowable in that, for example, in failing to disclose the first and second antenna as claimed, e.g. the first antenna first antenna resonating within and the second antenna resonating out of a band gap, Seivenpiper '756 necessarily fails to disclose that the first frequency band is in a higher frequency side than the second frequency band, that the first frequency band is in a lower frequency side than the second frequency band, that the first antenna is a hula-hoop type antenna

including a horizontal conductor which is parallel to the surface of the substrate sheet, that the second antenna is a helical antenna, that the second antenna is a non-uniform helical antenna having a plurality of different pitches, or that the second antenna includes a linear conductor bar and a helical antenna which are cascade-connected to each other.

Applicants also note that no evidence has been provided of a teaching or suggestion *contained in the references* sufficient to motivate one of ordinary skill in the art to make the combination. Thus, in addition to failing to teach or suggest the claimed features, the applied art combination is improperly motivated.

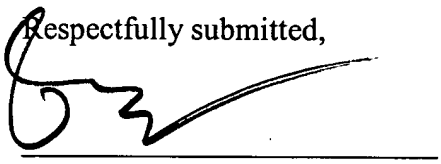
The indication of allowability with regard to claims 2 and 13-17 is noted with appreciation. Applicants reserve the opportunity to rewrite claims 2 and 13-17 in independent form pending the outcome of further prosecution on the merits.

New claims 18, 19 and 20 recite features including that one or both of the first antenna and the second antenna is formed from a linear conductor bar (page 12, line 18) and that the first frequency band and the second frequency band do not overlap (page 17, line 8). New claims 18, 19 and 20, by virtue of depending from claim 1, are allowable for at least the reasons set forth herein above with regard to claim 1. Favorable consideration is respectfully requested.

In view of the foregoing, the applicants respectfully submit that the present application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

Please charge any unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,



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